

BTS80 Series

Floor concealed door closers

We make access in life smart and secure





Dependable and versatile floor-concealed closer

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BTS80 Series
Floor-concealed closer

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The BTS80 Series of floor-concealed door closers offers adaptability to almost any installation.

The closer's compact body permits its use where a larger closer would be prohibitive. Versatility allows installation in thin slab concrete subfloor construction. A wide selection of interchangeable spindles makes the BTS80 suitable for virtually any floor covering or threshold application. Because the BTS80 can control exceptionally heavy single- and double-

acting doors, you can incorporate the floor closer into almost any design to meet most materials, size, and weight requirements.

Trouble-free performance under adverse climatic and traffic conditions makes the BTS80 floor-concealed closer dependable and a perfect choice for even the most rigorous applications. For total control and uncompromising creativity for any door opening, specify a BTS80 floor-concealed closer.

Features	BTS80	BTS80	BTS80 F
ANSI Spring Size	3	4, 6	5
Non-handed unit suitable for both single-and double-acting doors	•	•	–
Controlled closing with two adjustable valves	175°–70° 70°–0°	175°–70° 70°–0°	180°–70° 7°–0°
Mechanical backcheck	–	•	•
Delayed Action	•	•	–
Multipoint hold open between 75° and 175°	•	•	–

• yes – no



Intertek



Intertek

dormakaba USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.

Specifications

Certification

The dormakaba BTS80 F Series is listed by U.L. and C.U.L. under their continuing reinspection programs.

The dormakaba BTS80 Series is certified to the requirements of ANSI/BHMA A156.4 for grade 1 closers.

Specifications

All floor-concealed door closers shall be dormakaba BTS80 Series employing a cam and roller mechanism. The closers shall be capable of controlling interior or exterior doors weighing up to 660 lb and measuring up to 4'-0" wide exterior and 4'-6" interior. The closers will have selectable multipoint hold open between approximately 75° and 175°. The closers will have selectable delayed action to allow delayed closing from 175° to 75°. The closers will have

mechanical backcheck at approximately 70°. Dual valve adjustment will provide controlled closing speed from approximately 175° opening range, even in cold temperature conditions. The closer will provide adjustment within the cement case to allow lateral and longitudinal adjustment of 1/4" and vertical height adjustment of 5/32". Field interchangeable spindles will be available to provide bottom door clearances ranging from 5/16" to 2-5/16".

Optional specifications

The closers should be used with sealing compound SC2 to prevent water or cleaning solvent from entering the cement case.

Floor-concealed door closers for all fire doors shall be dormakaba BTS80 F. The closers shall be single-acting and have controlled closing from a full 180°. A sweep range of 180°–0° and latch range of 7°–0° will help insure positive latching of the door.

Finishes

Optional plated finishes

- Brass: 605 (Bright) or 606 (Satin)
- Bronze: 611 (Bright), 612 (Satin), or 613 (Oxidized Satin Oil Rubbed)
- Nickel: 618 (Bright) or 619 (Satin)
- Chrome: 625 (Bright) or 626 (Satin)

Standard sprayed finishes

- Aluminum: 689
- Bronze: 691 (Dull) 690 (Statuary), or 695 (Dark Duranodic).
- Gold: 696
- Black: 693

Optional dormakaba custom color or designer color finishes

Contact Customer Service.

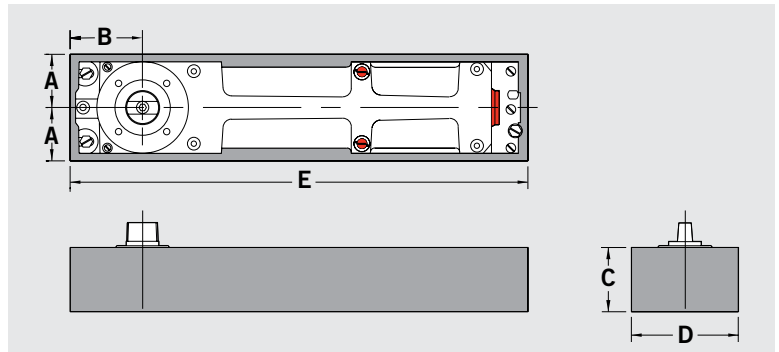
Warranty

For details, refer to dormakaba Limited Warranty on our website at go.dormakaba.com/terms.

Size selection chart BTS80 / BTS80 F

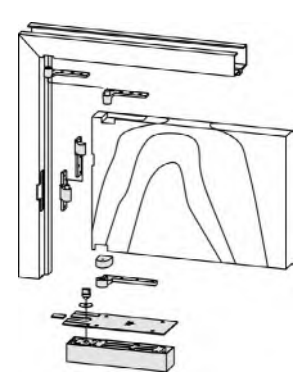
BTS80	BTS80 F	Exterior	Interior
ANSI Size 3		2'-6"-3'-0"	2'-6"-3'-6"
ANSI Size 4	ANSI Size 5	2'-6"-3'-6"	2'-6"-4'-0"
ANSI Size 6		3'-6"-4'-0"	4'-0"-4'-6"

Maximum door widths and recommended sizes shown are for average conditions. If there are unusual site conditions, e.g. high or exceptionally heavy doors or wind pressure, the next stronger spring size should be selected.



	A	B	C	D	E
Inches	1-13/32–1-21/32	2–2-1/4	2/3/08	3/1/08	13-7/16
Millimeters	36–42	51–57	60	78	341

How to order BTS80 Series



Series
BTS80

Spindle	
1-1/2" Pre-Loaded Spindle —	80030
1-5/16" Pre-Loaded Spindle —	80025
1-1/8" Pre-Loaded Spindle —	80020
7/8" Pre-Loaded Spindle —	80015
3/4" Pre-Loaded Spindle —	80010
1/2" Pre-Loaded Spindle —	80005
5/16" Pre-Loaded Spindle —	80003
2-5/16" Spindle —	74050
2-1/16" Spindle —	74045
1-7/8" Spindle —	74040
1-11/16" Spindle —	74035
1-1/2" Spindle —	74030
1-5/16" Spindle —	74025
1-1/8" Spindle —	74020
7/8" Spindle —	74015
13/16" Spindle —	74012
3/4" Spindle —	74010
5/8" Spindle —	74007
1/2" Spindle —	74005
5/16" Spindle —	74003

Optional accessories

E80624	Through Wire CH Top Pivot (4 wire)
E80622	Through Wire CH Top Pivot (2 wire)
8062	CH Top Pivot
75200	Through Wire Intermediate Pivot for 3/4" Offset
15233	3 h Intermediate Pivot for 1-1/2" Offset
15222	20 min Intermediate Pivot for 1-1/2" Offset
15220	Through Wire Intermediate Pivot for 1-1/2" Offset
75243	3 h Intermediate Pivot for Lead Lined 3/4" Offset (see note*)
75242	20 min Intermediate Pivot for Lead Lined 3/4" Offset (see note*)
75240	Intermediate Pivot for Lead Lined 3/4" Offset (see note*)
75233	3 h Intermediate Pivot for 3/4" Offset
75222	20 min Intermediate Pivot for 3/4" Offset
75220	Intermediate Pivot for 3/4" Offset
SC2	Sealing Compound
TP80 CH	Terrazo Pan CH and 1-1/2" Offset
TP80	Terrazo Pan for 3/4" Offset

Deducts

LBX	Less Cement Box
LFP	Less Floor Plate
LTP	Less Top Pivot

Hand
Specify for Left Handed Units
LH
Specify for Right Handed Units
RH

BTS80	D		74010	RH	AMS		626	
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CH Double Acting, Aluminum Door and Frame
A
3 — Size 3, Light Opening Force, No Backcheck

CH Double Acting, Wood or Steel Door and Frame
B
4 — Size 4, No Need to Specify

1-1/2" Offset, Handed
C
5 — Size 5, for use w/Fire Pkgs, No Delay, No Hold Open

1-1/2" Offset, 20 min Rated Handed
C-E
6 — Size 6, Strong

1-1/2" Offset, 3 h Rated Handed
C-F

CH Single Acting, Aluminum Door and Frame
D
Spring size

CH Single Acting, Wood or Steel Door and Frame
E
3/4" Offset, Handed

Independent Hung, Non-Handed
F
3/4" Offset, 20 min Rated Handed

Independent Hung, Up to 3 h Rated, Non-Handed
G
3/4" Offset, 3 h Rated Handed

3/4" Offset Lead Lined, Handed*
H

3/4" Offset Lead Lined, 20 min Rated Handed*
I

3/4" Offset Lead Lined, 3 h Rated Handed*
IF

Independent Hung On Pocket Pivots, Non-Handed
L
L-E
L-F
P
PF

Fastener packs

AMS	All Metal Screws	600	Primed
W2	All Wood Screws	689	Aluminum
W1	1/2 Wood Screws	690	Statuary Bronze
AMSAWS	All Metal Screws All Wood Screws	691	Dull Bronze
		693	Black
		695	Dark Duranodic Bronze
		696	Gold
		PNT	Special Sprayed Finish (must specify)

Painted

Bright Brass	605
Satin Brass	606
Bright Bronze	611
Satin Bronze	612
Oxidized Satin Oil Rubbed	613
Bright Nickel	618
Satin Nickel	619
Bright Chrome	625
Satin Chrome	626

Plated

* "L" Package Door Thickness Note:
The standard door thickness is 1-3/4", and is the default unless otherwise specified.

Other alternative sizes are

Examples: L-E-2-1/2.....75242-2-1/2

Example above 20 min. lead lined package for 2-1/2" thick door.

Note: All combinations of features and options are not available for all models.

Technical details

BTS80 Series

- Compact closer body and cement case 2-3/8" deep suited for thin slab concrete construction.
- Accommodates doors weighing up to 660 lb and 4'-6" wide interior and 4'-0" exterior.
- Closer adjustment in cement case provides lateral and
- longitudinal adjustment of 1/4" and height adjustment of 5/32".
- A pressure relief valve protects closer from damage caused by forced closing.
- Optional sealing compound SC2 prevents water or cleaning solvent from entering the cement case.
- If door hardware or adjacent structures interfere with maximum opening, an auxiliary stop should be installed.

BTS80

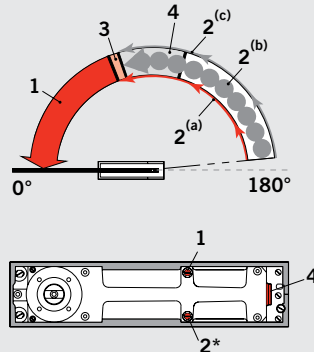
- Closer body is non-handed.
- Mechanical backcheck at approximately 70° (excluding size 3, where backcheck is removed to meet barrier-free through 90° of opening for easier passage).
- Selectable delayed action between 175° and 75°. Extends the closing cycle to allow unobstructed passage.
- Delayed action is functional when hold open is not engaged.
- Dual thermostatic control valves combined with special hydraulic fluid provide controlled closing from 175°.
- Selectable multipoint hold open between approximately 75° and 175°.
- Adjustment for start of hold open range or when delayed action releases. Adjustable between 75° and 105°.

BTS80 F



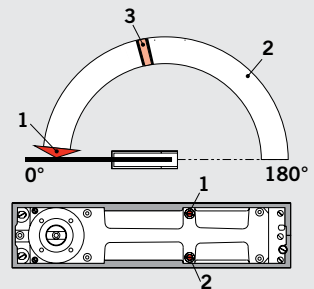
- U.L. listed for use with fire doors.
- Closer body is handed.
- Non-hold open only.
- Mechanical backcheck at approximately 70°.
- Dual thermostatic control valves combined with special hydraulic fluid provide controlled closing from 180°.
- Recommended for applications using a wall magnet to hold a door open at 180°.

- 1 Valve adjustment 70°–0°.
- 2 (a) Valve adjustment 175°–70°. (b) Selectable multipoint hold open between 75° and 175°. (c) Selectable delayed action from 175° to 75°.
- 3 Mechanical backcheck at approximately 70° (except size 3).
- 4 Start of hold open/end of delayed action range adjustment. Adjustable between 75° and 105°.



Note: Clockwise turns create a longer delay time with a slower closing speed. Turning valve completely clockwise creates hold open and eliminates delayed action.

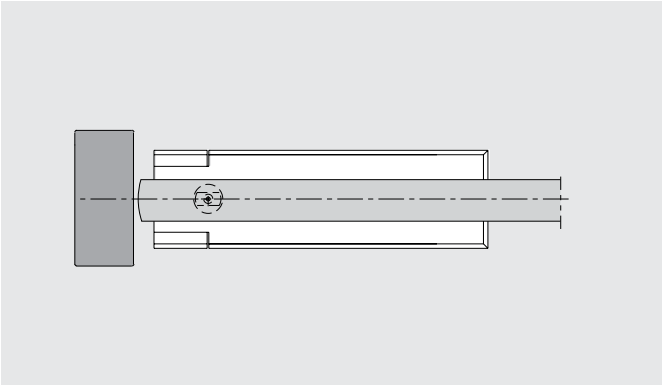
- 1 Valve adjustment 7°–0°.
- 2 Valve adjustment 180°–0°.
- 3 Mechanical backcheck at approximately 70°.



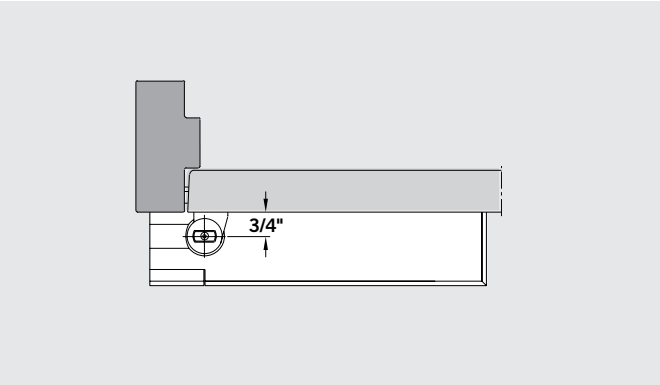
Applications

Accessory packages for the following applications are designated with an alpha suffix— "A" or "B," for example. For application details and accessory illustrations, see BTS Applications and Accessories brochure.

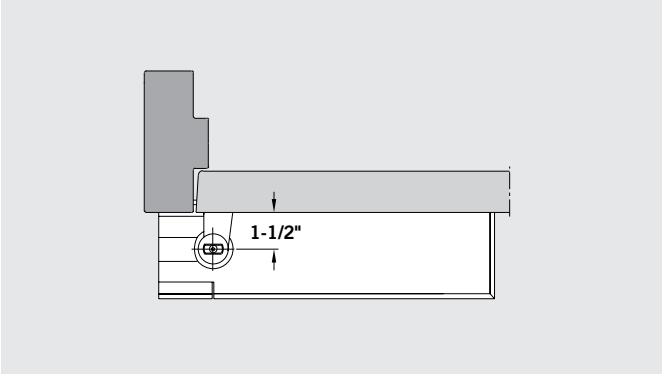
Center hung packages (A, B, G, H)



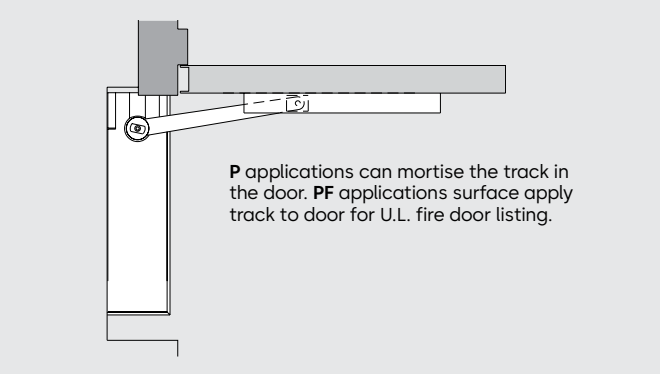
3/4" Offset packages (D, E, F, L, L-E, L-F)



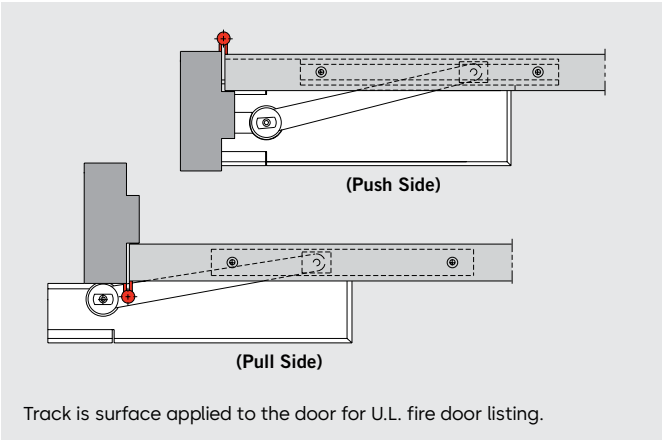
1-1/2" Offset packages (C, C-E, C-F)



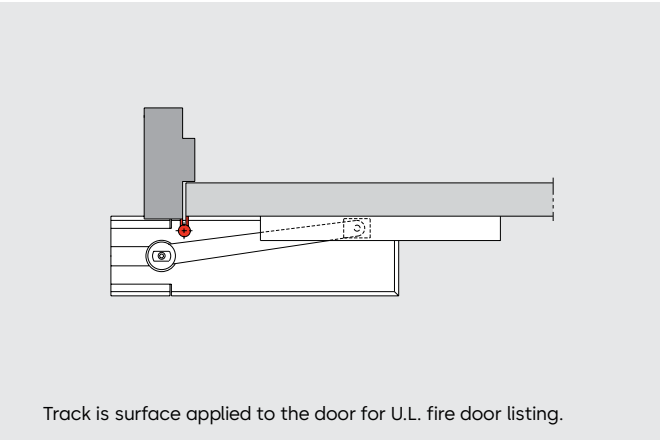
Pocket door packages (P) / Pocket Fire Door Packages (PF)



Independent hung door packages (I)



Independent hung fire door packages (IF)



Spindles

Spindle #	Dimension "x" (Door Clearance)	3° Offset Spindle No.	Dimension "y"
74003	5/16"	80003	1/8"
74005	1/2"	80005	5/16"
74007	5/8"	—	7/16"
(STD) 74010	3/4"	80010	1/2"
74012	13/16"	—	5/8"
74015	7/8"	80015	11/16"
74020	1-1/8"	80020	7/8"
74025	1-5/16"	80025	1"
74030	1-1/2"	80030	1-5/16"
74035	1-11/16"	—	1-1/2"
74040	1-7/8"	—	1-11/16"
74045	2-1/16"	—	1-7/8"

Offset spindles

Spindles are available with a 3° offset for additional pressure to hold door in the closed position. Normally, this is only necessary for center-pivoted single acting applications. However, they can also be used with other applications to compensate for templating errors. Specify hand of offset spindle when ordering.

Extended spindle insert

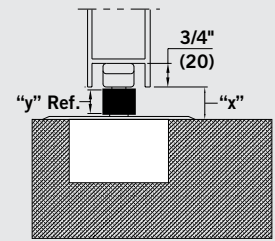
Note: Closer and arm must be installed per template for door clearances shown to be valid.

Closers with extended spindle inserts are used with thresholds, carpeted floors, or terrazzo pans, or in cases where more clearance between door and floor is required. All spindles are zinc plated.

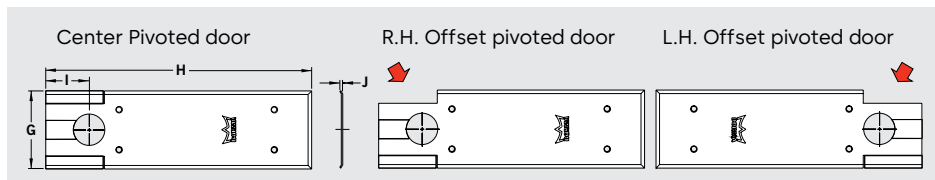
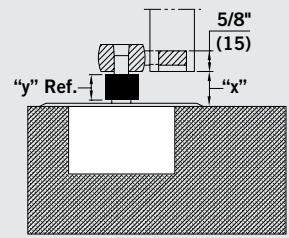
Cover plate

Universal cover plate 7410, suitable for left hand/right hand, 3/4" offset, 1-1/2" offset, and center pivoted doors. Material is stainless steel or brass depending on the plated finish specified.

Center hung applications



Offset hung applications



	G	H	I	J
Inches	4/1/08	14-3/32	2/9/32	Mar-32
Millimeters	105	358	58	2

Our Sustainability Commitment

We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. Sustainability at product level is an important, future-oriented approach in the field of construction. In order to give quantified disclosures of a product's environmental impact through its entire life cycle, dormakaba provides Environmental Product Declarations (EPD), based on holistic life cycle assessments. <https://www.dormakabagroup.com/en/sustainability/product-declarations>.

Our offering

Access Automation Solutions

Entrance Automation
Entrance Security



Access Control Solutions

Electronic Access & Data
Escape and Rescue Systems
Lodging Systems



Access Hardware Solutions

Door Closers
Architectural Hardware
Mechanical Key Systems



Services

Technical Support
Installation and commissioning
Maintenance and Repair



Key & Wall Solutions

Key Systems
Movable / Sliding Walls



Safe Locks

Electronic Safe Locks
Mechanical Safe Locks
Boltworks and Accessories



Glass systems

Manual door systems
Glass fittings
Horizontal Sliding Walls



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